

CLAIMS

What is claimed is:

1. An electroluminescence display device comprising:
 - a substrate;
 - a thin-film transistor formed on the substrate, the thin-film transistor including a source electrode, a drain electrode, and a gate electrode; wherein a portion of at least one of the source electrode and the drain electrode is directly disposed on the substrate;
 - an EL element formed on the substrate, the EL element comprising:
 - a first electrode directly disposed on the substrate;
 - an electroluminescent emitter layer disposed on the first electrode layer;
 - a second electrode formed on the electroluminescent emitter layer such that the electroluminescent emitter layer is disposed between the first and second electrodes; and
 - wherein a portion of the electroluminescence element's first electrode contacts the portion of at least one of the source electrode and the drain electrode that is directly disposed on the substrate.
2. An electroluminescence display device of claim 1, wherein the portion of at least one of the source electrode and drain electrode that is directly disposed on the substrate having an edge surface and a top surface that directly contact the electroluminescence element's first electrode.
3. An electroluminescence display device of claim 1, wherein the electroluminescence element is an organic light emitting diode.
4. An electroluminescence display device of claim 1, wherein the substrate includes at least one insulation buffer film on its top surface on which the thin-film transistor and the electroluminescence element are formed.

5. An electroluminescence display device of claim 4, wherein the at least one insulation buffer film is a silicon nitride layer.
6. An organic electroluminescence device of claim 4, wherein the at least one insulation buffer film is a silicon oxide layer.
7. An electroluminescence display device comprising:
a substrate;
a thin-film transistor formed on the substrate, the thin-film transistor including a source electrode, a drain electrode, and a gate electrode; wherein a portion of at least one of the source electrode and the drain electrode is directly disposed on the substrate;
an electroluminescence element formed on the substrate, the electroluminescence element comprising:
a first electrode directly disposed on the substrate;
an electroluminescent emitter layer disposed on the first electrode layer;
a second electrode formed on the electroluminescent emitter layer such that the electroluminescent emitter layer is disposed between the first and second electrodes thereby forming the electroluminescence element; and
wherein the portion of at least one of the source electrode and the drain electrode that is directly disposed on the substrate also contacts the first electrode of the electroluminescence element.
8. An electroluminescence display device of claim 7, wherein the first electrode of the electroluminescence element having an edge surface and a top surface that directly contact the portion of at least one of the source electrode and the drain electrode that is directly disposed on the substrate.
9. An electroluminescence display device of claim 7, wherein the electroluminescence element is an organic light emitting diode.

10. An electroluminescence display device of claim 7, wherein the substrate includes at least one insulation buffer film on its top surface on which the thin-film transistor and the electroluminescence element are formed.
11. An electroluminescence display device of claim 10, wherein the at least one insulation buffer film is a silicon nitride layer.
12. An organic electroluminescence device of claim 10, wherein the at least one insulation buffer film is a silicon oxide layer.
13. An electroluminescence display device comprising:
a substrate;
a thin-film transistor formed on the substrate, the thin-film transistor including a source electrode, a drain electrode, and a gate electrode; wherein a portion of at least one of the source electrode and the drain electrode is directly disposed on an insulation layer on the substrate;
an electroluminescence element formed on the substrate, the electroluminescence element comprising:
a first electrode directly disposed on the insulation layer;
an electroluminescent emitter layer disposed on the first electrode layer;
a second electrode formed on the electroluminescent emitter layer such that the electroluminescent emitter layer is disposed between the first and second electrodes; and
wherein a portion of the electroluminescence element's first electrode contacts the portion of at least one of the source electrode and the drain electrode that is directly disposed on the insulation layer.
14. An electroluminescence display device of claim 13, wherein the insulation layer is an insulation buffer film on the substrate.

15. An electroluminescence display device of claim 13, wherein the insulation layer is a gate oxide insulation film.
16. An electroluminescence display device of claim 13, wherein the insulation layer is an interlayer dielectric layer.
17. An electroluminescence display device of claim 13, wherein the portion of at least one of the source electrode and drain electrode that is directly disposed on the insulation layer having an edge surface and a top surface that directly contact the electroluminescence element's first electrode.
18. An electroluminescence display device of claim 13, wherein the electroluminescence element is an organic light emitting diode.